

72 SERIES

Advanced Remote Starters & Vehicle Security Systems

ULTRA START

TM

INSTALLATION MANUAL

THIS MANUAL COVERS THE OPERATIONS OF
THE 1172 AND 1272 SERIES REMOTE VEHICLE
STARTERS

**WARNING: NEVER USE AN AUTOMATIC TRANSMISSION
STARTER IN A MANUAL TRANSMISSION VEHICLE**

www.ultrastarters.com

Note: Some features may not be available on certain models.

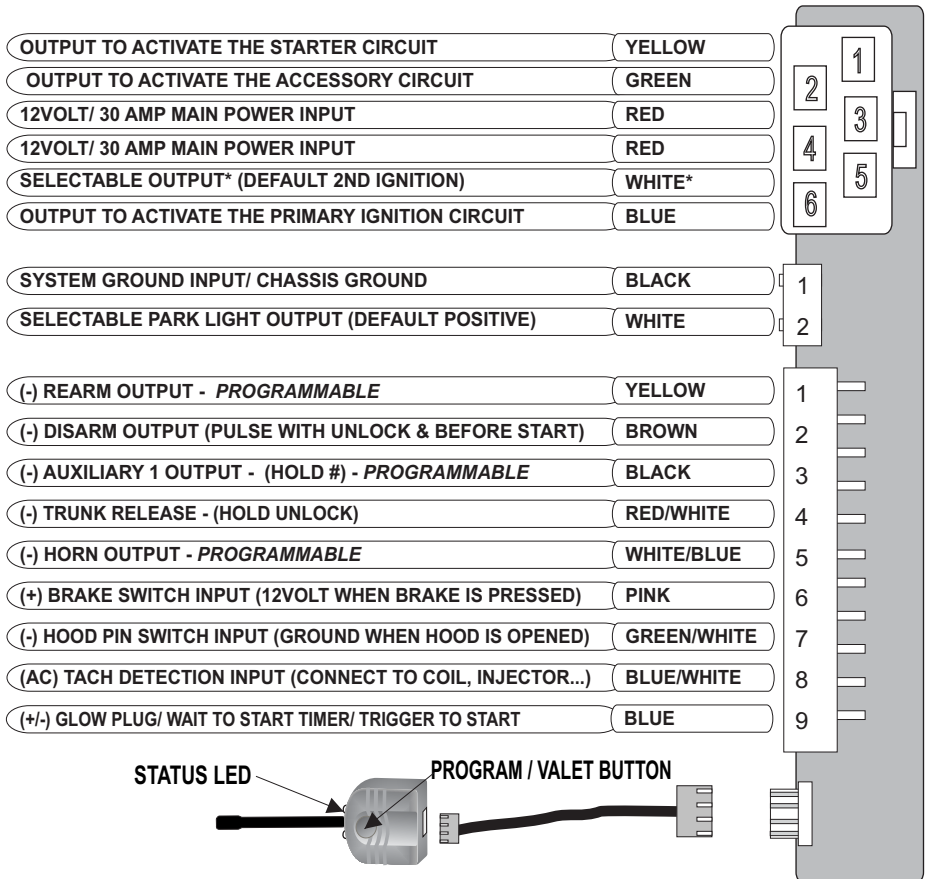
FCC ID NOTICE

This device complies with Part 15 of the FCC rules. Operation is subject to the following conditions:

1. This device may not cause harmful interference, and
2. This device must accept any interference received, including interference that may cause undesired operation.

CAUTION: Changes or modifications not expressly approved by the part responsible for compliance void the user's authority to operate this device.

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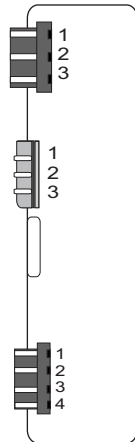
WIRE DIAGRAM

DO NOT INSTALL THIS SYSTEM INTO A MANUAL TRANSMISSION VEHICLE!!

WIRE DIAGRAM

OUTPUT TO ACTIVATE DOOR LOCK CIRCUIT (-)
OUTPUT FOR VOLTAGE INVERTER*
OUTPUT TO ACTIVATE DOOR UNLOCK CIRCUIT (-)
GROUND WHEN RUNNING (BYPASS TURN ON)
GROUND FOR BYPASS MODULE
N/A

GREEN
N/A*
BLUE
WHT/VIOLET
BLACK
N/A



BYPASS MODULE DATA COMMUNICATION PORT**

*The default setting is for idatalink modules. For Fortin bypass modules power-up the system with the Fortin module connected to the data port to set the default to Fortin bypass module.

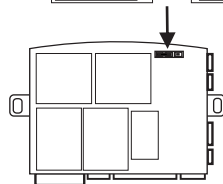
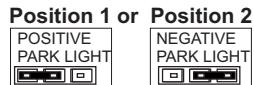
*** THE CENTER PIN OF THE KEYLESS CONNECTOR IS LOW CURRENT AND IS DESIGNED TO SUPPLY POWER TO DOOR LOCK MODULES (DO NOT CONNECT TO RELAYS) OVERLOADING THIS OUTPUT WILL DAMAGE THE MODULE!**

**** FOR USE WITH COMPATIBLE BYPASS MODULES ONLY.**

SELECTABLE PARK LIGHT OUTPUT

BY DEFAULT THE SYSTEM COMES WITH THE PARK LIGHT JUMPER SET FOR POSITIVE PARK LIGHT OUTPUT. TO CHANGE THE SYSTEM TO A NEGATIVE PARK LIGHT OUTPUT, PLACE THE JUMPER IN THE NEGATIVE PARK LIGHT POSITION SHOWN IN THE DIAGRAM. **(Position 2)**

***THE PARK LIGHT RELAY WILL NOT “CLICK” WHEN SET FOR NEGATIVE PARK LIGHTS.**



AUTO TACH/ TACHLESS LEARNING

Start the vehicle with the ignition key.



2 CHIRPS/ 2 FLASHES = TACH MODE
3 CHIRPS/ 3 FLASHES = DATA TACH MODE
4 CHIRPS/ 4 FLASHES = TACHLESS MODE

NOTES:

When tach learning the system first sends out a request for tach from the data port. If it gets a valid rpm response over 750 rpm then it goes into data tach mode (3 flashes). If there is no response, the unit will look for the tach/tachless.

Once the starter goes on then off, the unit will learn tach, if there is no tach detected within a few seconds after starting, the system will learn in Tachless mode after 20 seconds.

If there is no starter detected, the system learns tach after 30 seconds. If no tach is detected the system will learn tachless after an additional 10 seconds.

HYBRID MODE'S

Hybrid mode 1 - This option requires a tach connection. Once the vehicle starts the system will not monitor the tach input and stay running for 15 minutes.

Hybrid Mode 2- (No Tach wire connection) This setting will power up the ignition wires, pulse the start output for 2 seconds then stay on/ run for 15 minutes. See Program Menu 4, Hybrid Mode 1 & 2. Hybrid mode 2 was designed for "Push to Start" systems and hybrid vehicles that may not actually start until the battery voltage drops.

****Hybrid Mode 2** is also ideal for vehicles with no starter wire or "Automatic Starting". This is when the vehicle's starter motor will continue to crank and start the vehicle even if the key is only turned to the start position momentarily.

LOW IDLE LEARNING

Hold the brake then start the vehicle with the key. Place the transmission into reverse to lower the RPM. Press and release the button on the antenna twice. The system will chirp the Horn and flash the park lights two times to confirm Tach Mode or chirp 4 times/ 4 flashes to indicate Tachless Mode re-learn.

6-PIN CONNECTOR

PIN 1	YELLOW	STARTER OUTPUT	This wire will test 0V with the key off, in the Accessory position and when the Ignition is in the on. This wire is 12volts in the start/ crank position only.
PIN 2	GREEN	HEATER OUTPUT	This wire will test 0V when key is off, 12volts in the ACC and IGN positions and off during the start/ crank position
PIN 3	RED	12v INPUT 30A	Connect to constant 12volts. This input supplies the 12volt power for the IGN 1, IGN 2 and Park Light output.
PIN 4	RED	12v INPUT 30A	Connect to constant 12volts. This input supplies the 12volt power for the Accessory and Starter output.
PIN 5	WHITE	SELECTABLE OUTPUT	2nd Ignition, Accessory or Start output. Programmable. Note: This output does not switch to default when the system is reset.
PIN 6	BLUE	IGNITION OUTPUT	This wire will test 0V in the off and Accessory positions then switch to 12volts in the Ignition and Start and run position.

2-PIN CONNECTOR

PIN 1	BLACK	SYSTEM GROUND	Connect to chassis ground.
PIN 2	WHITE	PARK LIGHT OUTPUT (SELECTABLE)	Connect to the vehicles positive park light wire or change the jumper and connect to the vehicle negative park light wire. The default position of the jumper is Positive Park Light Output .

3 PIN DOOR LOCK CONNECTOR

PIN 1	GREEN	(-) LOCK OUTPUT	Connect to lock wire from the switch on vehicles with a negative type switch. **LOW CURRENT ONLY**
PIN 2	N / A	12V + DOOR LOCK INVERTER	This output will supply 12volts for a plug-in type door lock module. Do not use this input to power-up relays **LOW CURRENT ONLY**
PIN 3	BLUE	(-) UNLOCK OUTPUT	Connect to unlock wire from the switch on vehicles with a negative type switch. **LOW CURRENT ONLY**

3 PIN BYPASS MODULE CONNECTOR




PIN 1	WHITE/ VIOLET	GROUND WHEN RUNNING	This wire is used for bypass module activation or adding additional relays to be triggered only when the remote starter activates.
PIN 2	BLACK	GROUND	This wire can be used to supply ground to your bypass module.
PIN 3	RED	12 VOLT OUT	This wire can be used to supply 12 volts to your bypass module. May not be available on all harnesses. **LOW CURRENT ONLY**

9-PIN CONNECTOR



PIN 1	YELLOW	RE-ARM (-) <i>PROGRAMMABLE</i>	Supplies one .75 second pulse when locked and one .75 second pulse after remote start shutdown. Factory alarm re-arm/ RAP shutdown.
PIN 2	BROWN	DISARM (-)	Supplies one .75 second pulse when the unlock button is pressed and one .75 second pulse before remote start activation. For factory alarm disarm/ or as computer "wake up".
PIN 3	BLACK	AUX #1 OUTPUT (-) <i>PROGRAMMABLE</i>	Default- AUX channel output when the # button is held(no car finder on #) Programmable for a (-) Ignition or (-) Dome Light output with the (#) button activating car finder mode.
PIN 4	RED /WHITE	TRUNK RELEASE (-)	Output activates when the unlock button is held for at least 3 seconds. The output will stay on for up to 5 seconds if the button is held. Programmable for Dome light Output or 2nd Unlock Output.
PIN 5	WHITE/BLUE	HORN OUTPUT (-) <i>PROGRAMMABLE</i>	Connect this wire to the factory horn wire of the vehicle. This connection will provide audible confirmation when programming and when a function is performed.
PIN 6	PINK	BRAKE SWITCH INPUT (+)	This wire must be connected to the wire at the brake switch that changes to 12volts when the brake is pressed.
PIN 7	GRN/WHITE	HOOD PIN INPUT (-)	Connect this wire to the supplied hood pin switch. If ground is detected on this input the remote starter will not activate. Programmable for N/C hood pin type (Factory hood pin)
PIN 8	BLUE/WHITE	TACH WIRE INPUT (A/C)	This wire is used to detect when the vehicle has started. The Tach source is typically taken from a fuel injector, coil, coil pack or crank position sensor. The Tach wire is generally found as the opposite from the common wire at the coil or fuel injector.
PIN 9	BLUE	GLOW PLUG INPUT (+)	Default Gas Mode/ Positive Glow Plug. Programmable.

The system can lean up to 4 different remote's. Each remote to be used **MUST** be programmed together during the same sequence. For security, when a new remote is programmed all previous remote's are deleted. Please see remote operation chart for information on using Second Car / Pad Lock Operations.



ENTERING REMOTE PROGRAM MODE

- 1 -  Cycle the Ignition Key - ON/OFF ON/OFF ON (Leaving the key ON)
- 2 -  HOLD the program switch, the HORN will honk ONCE and the park lights will turn on. (If the HORN does not honk repeat step 1) CONTINUE TO HOLD until the HORN honks 5 times
- 3 -  1 honk confirms program mode entered followed by 5 honks confirming transmitter program mode

PROGRAMMING REMOTE'S

- 4 -  Press & Release LOCK (START ON 1172) button on 1st Remote to be Programmed for Normal Operation *If remote(s) are to be programmed for "PADLOCK" skip and goto step 6.*
- 5 -  HORN will honk 1 time to confirm remote has been programmed (If the HORN does not honk press button again)

REPEAT STEP 4 IF A SECOND REMOTE IS TO BE PROGRAMMED FOR NORMAL OPERATION

- 6 -  Press & Release BUTTON 4 on Remote to be Programmed for 2ND CAR OR PAD LOCK
- 7 -  HORN will honk 1 time to confirm remote has been programmed (If the HORN does not honk press button again)

To program 2nd car operation on 2way models enter transmitter program mode and turn the # icon on then program the transmitter to the vehicle. If the # icon is on the remote is in 2nd car operation

REPEAT STEP 6 IF A SECOND REMOTE IS TO BE PROGRAMMED FOR 2ND CAR / PADLOCK OPERATION

- 8 -  Turn ignition key OFF to exit remote program mode when all required remote's have been programmed.

ENTERING PROGRAM MODE

- 1 - Cycle the Ignition Key On/Off On/Off On (Leaving the key ON)
- 2 - Press and release the Program Switch located on the antenna 1 time.
*The Horn will chirp and the park light will turn on to confirm that the system has entered Program Mode.
- 3 - Select the Program Menu by pressing the button that corresponds to the desired Program Menu.

Press Lock



MENU 1

Press Unlock



MENU 2

Press Start



MENU 3

Press #



MENU 4

- 4 - Press and Release the Program Switch to advance through the settings.

*The horn will chirp and LEDs flash the same number of times as the selected setting.

- 5 - Press and hold the Program Switch to change the setting.

(The horn will honk and the park lights will flash to indicate the option selected)

- 6 - To exit Program Mode, turn the key off.

(Confirmed by Long Horn Chirp)

1172 SERIES- To access Menu 1 press and release the program switch again after entering program mode. The LEDs will flash in a series of 1. (Menu 1 Setting 1)
To access Menu 4 the system must be programmed for Setting 1 or 2 in program menu 3 setting 9. (2 BUTTON REMOTE)

SYSTEM RESET

- 1 - Cycle the Ignition Key On/Off On/Off On (**Leaving the key ON**)
- 2 - Press and **RELEASE** the Program Switch 1 time.
(Horn will chip to confirm program mode has been entered)
- 3 - Press and **HOLD** the Program Switch for 5 seconds or until the Horn Chirps 3 times.
- 4 - Turn the ignition key **OFF** to exit.



PROGRAM MODE 1

SETTING # LED FLASHES	SETTING DESCRIPTION	OPTION 1 1 CHIRP	OPTION 2 2 CHIRPS	OPTION 3 3 CHIRPS
1	IGNITION AUTO-LOCK	IGNITION AUTO-LOCK / UNLOCK	IGNITION AUTO-LOCK ONLY	IGNITION AUTO-LOCKS DISABLED
2	HORN SETTINGS	HORN CHIRPS DISABLED	HORN CHIRPS ENABLED	
3	DOOR LOCK PULSE OPTIONS	DOUBLE UNLOCK & SINGLE LOCK	DOUBLE LOCK & SINGLE UNLOCK	SINGLE LOCK & SINGLE UNLOCK
4	DOOR LOCK / UNLOCK PULSES	0.25 SEC PULSES	3 SEC PULSES	0.72 SEC PULSES
5	AUX OUTPUT 1	(-) IGNITION OUTPUT (#) ACTIVATES CAR FINDER	(-) DOME LIGHT OUTPUT (#) ACTIVATES CAR FINDER	AUX CHANNEL (#)
6-9 NA	N/A	N/A	N/A	N/A



PROGRAM MODE 2

SETTING # LED FLASHES	SETTING DESCRIPTION	OPTION 1 1 CHIRP	OPTION 2 2 CHIRPS	OPTION 3 3 CHIRPS
1	VALET SETTINGS	SECURE VALET 15 SECONDS	STANDARD VALET 5 SECONDS	
2	PARK LIGHT OUTPUT	30 SECONDS ON DISARM	NORMAL OPERATION	
3	HORN TIMING	5MS PULSED OUTPUT	50MS PULSED OUTPUT	10MS PULSED OUTPUT
4	N/A	N/A	N/A	N/A
5	HOOD PIN TYPE	N/C FACTORY TYPE	AFTER MARKET TYPE	
6	N/A	N/A	N/A	N/A

**PROGRAM MODE 3**

SETTING # LED FLASHES	SETTING DESCRIPTION	OPTION 1 1 CHIRP	OPTION 2 2 CHIRPS	OPTION 3 3 CHIRPS
1	SELECTABLE RELAY	2ND STARTER	2ND ACCESSORY	2ND IGNITION
2	SPECIAL DOOR LOCK OPTIONS	UNLOCK BEFORE / LOCK AFTER START	LOCK AFTER STARTER SHUT OFF	NO ADDITIONAL PULSES
3	GLOW PLUG / START TRIGGER	(-) GLOW PLUG OR 20 SECONDS DELAY	POSITIVE TRIGGER TO START (2 PULSES)	GAS / POSITIVE GLOW PLUG
4	RE-ARM OPTIONS	PULSE WITH LOCK	PULSE AFTER START (DEFROST / SEAT)	PULSE WITH LOCK & AFTER SHUTDOWN
5	RUNTIME	4 MINUTE RUNTIME	45 MINUTE RUNTIME	15 MINUTE RUNTIME
6	REMOTE START ACTIVATION	PRESS BUTTON TWICE TO START	PRESS BUTTON ONCE TO START	
7	LED FLASHES	LEDS DO NOT FLASH WHEN LOCKED / ARMED	LEDS FLASH WHEN LOCKED / ARMED	
8	SPECIAL DISARM	PULSES ACC & GWR WHEN UNLOCKED	NORMAL DISARM	
9	UNLOCK BUTTON 1 / 2 BUTTON REMOTE ONLY	UNLOCK ONLY UNLOCK AND START FOR TIMER MODE & MENU 4	UNLOCK / LOCK TOGGLE UNLOCK AND START FOR TIMER MODE & MENU 4	UNLOCK OUTPUT

**PROGRAM MODE 4**

SETTING # LED FLASHES	SETTING DESCRIPTION	OPTION 1 1 CHIRP	OPTION 2 2 CHIRPS	OPTION 3 3 CHIRPS
1	TACH OPTIONS	HYBRID MODE 1	HYBRID MODE TWO	AUTO TACH / TACHLESS
2	ADJUST FOR OVER-CRANK	INCREASES TACH SETTING BY 10%		
3	ADJUST FOR UNDER-CRANK	DECREASE TACH SETTING BY 10%		
4	TACH WAIT SETTINGS	300ms TACH CHECK DELAY	750ms TACH CHECK DELAY	NO TACH CHECK DELAY
5	BYPASS MODULE	FORTIN BYPASS	IDATA LINK BYPASS	*IF THE STARTER IS POWERED UP WITH A FORTIN BYPASS UNIT IT WILL AUTO SET FOR FORTIN.

DIAGNOSTICS CHART

If the remote starter does not activate when the start button is pressed the park lights will flash a diagnostic to indicate what shutdown input has been triggered. For example: *If the start button is pressed the park lights flash 3 times slowly.* Looking at the chart below this would indicate that the system is in Service Mode, simply follow the instructions listed in the owners manual on exiting Service Mode and the remote starter will begin to function as normal.

PARK LIGHTS	STATUS LED	DIAGNOSTIC CODE
3 Slow Flashes	LEDs "ON" Solid	System Is In Service Mode
4 Slow Flashes	Series of 4 Flashes	Not in Reservation Mode
5 Flashes	Series of 5 Flashes	Hood Open
5 Slow Flashes	Series of 5 Flashes	Ignition On During Start Attempt
6 Flashes	Series of 6 Flashes	Brake Pedal Shutdown
7 Flashes	Series of 7 Flashes	Tach Lock-Out
8 Flashes	Series of 8 Flashes	3 Start Attempts Without Starting

TO ENTER DIAGNOSTIC MEMORY

Step 1- Turn the ignition ON then OFF. Press and release the Program Button.

Step 2- The system will respond with three park light flashes and the HORN (optional) will honk the same number of times as the events in memory.

****Maximum four events, four honks****

NOTE: If the HORN does not honk, there are no events in memory.

Step 3- Press the Program Button once to view the last shut down code. The HORN (optional) will honk once to confirm code one.

****If the HORN does not honk, there are no codes in memory.****

Step 4- The LEDs on the antenna will flash a code corresponding to a shut down trigger. Press the Program Button again for the second code.

The HORN will honk twice to confirm code two three time for code three...

Step 5- To Clear Diagnostic Memory. While in Diagnostic Mode press and hold the Program Button for five seconds. The park lights will flash and the HORN (optional) will honk once.

****Once diagnostic memory has 4 shutdown events in memory, the system will not record any further shutdown events until the system memory has been cleared.****

LED Flashes	Diagnostic
5 Flashes	The system was shutdown by the brake switch input
6 Flashes	The system was shutdown by the hood pin input
7 Flashes	The system did not detect the Tach signal.
8 Flashes	The system made 3 start attempts without starting

2 BUTTON REMOTE

WHEN PROGRAMMED FOR 2 BUTTON OR LOCK/UNLOCK TOGGLE PRESSING UNLOCK AND START AT THE SAME TIME WILL SELECT MENU 4 WHILE IN PROGRAM MODE.

THE SYSTEM MUST BE PROGRAMMED FOR 2 BUTTON REMOTE LOCK/UNLOCK TOGGLE TO OPERATE THE LOCK FEATURE ON THE VEHICLE. PRESSING THE UNLOCK BUTTON WILL UNLOCK THE DOORS THEN THE NEXT TIME YOU PRESS THE BUTTON THE DOORS WILL LOCK.

WHEN PROGRAMMED FOR 2 BUTTON OR LOCK/UNLOCK TOGGLE PRESSING UNLOCK AND START AT THE SAME TIME WILL SELECT 4 HOUR TIMER IN COLD START MODE*.

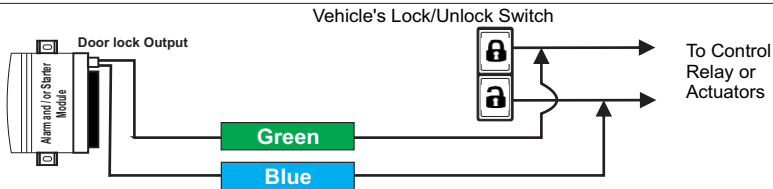
TO ACCESS TIMER MODE AND FOUR HOUR TIMER. HOLD THE UNLOCK AND START BUTTONS TO ENTER COLD START MODE. PRESS UNLOCK TO SET 2 HOUR, START WILL SET THREE HOUR AND UNLOCK AND START TOGETHER WILL SET THE FOUR TIMER. PRESS AND RELEASE UNLOCK AND START TO CANCEL TIMER MODE ONCE SET.

*ONE HOUR TIMER MODE IS NOT AVAILABLE WITH 2 BUTTON REMOTE'S.

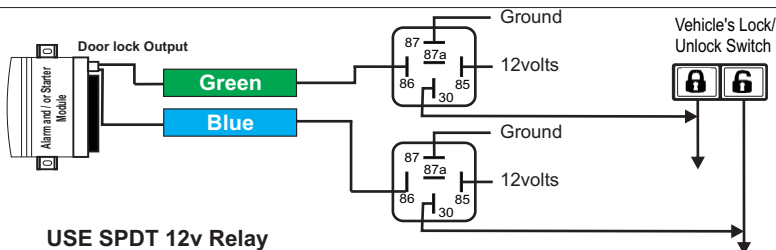
INSTALLER NOTES

DOOR LOCK DIAGRAMS

NEGATIVE DOOR LOCK
(LOW CURRENT)

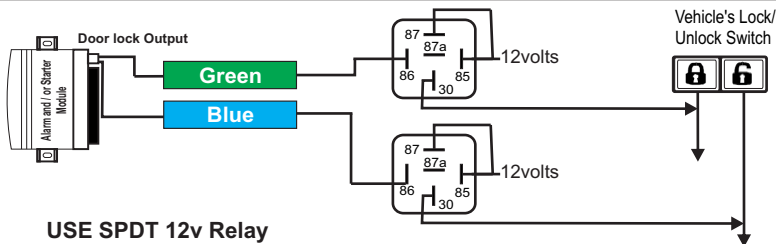


NEGATIVE DOOR LOCK
(LOW CURRENT)



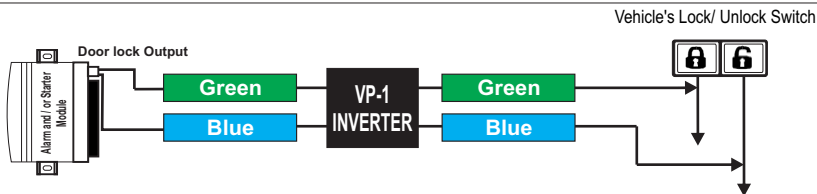
USE SPDT 12v Relay

POSITIVE DOOR LOCK
(LOW CURRENT)

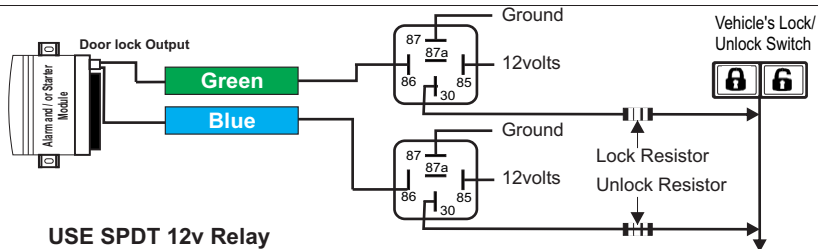
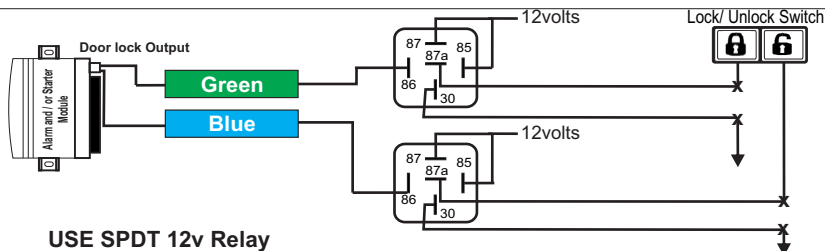
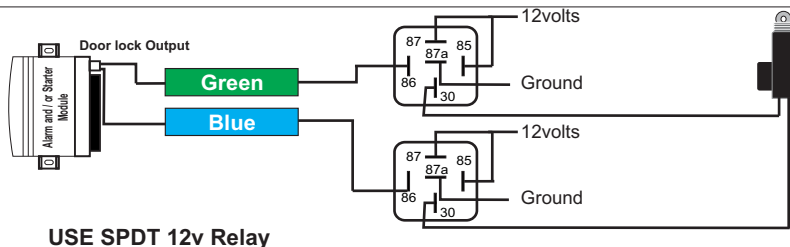


USE SPDT 12v Relay

POSITIVE TYPE USING
INVERTER



DOOR LOCK DIAGRAMS

NEGATIVE ONE WIRE
DOOR LOCKSREVERSE POLARITY DOOR
LOCK SYSTEMAFTER-MARKET DOOR
LOCK ACTUATORS

****FOR DETAILED VEHICLE WIRING INFORMATION GO TO:**
http://www.ultrastarters.com/wiring_diagrams.html

This site is for registered and authorized dealer only.

If you are an authorized dealer but have been registered, please fill out the service request form at
http://www.ultrastarters.com/wiring_diagrams.html

PRODUCT INFORMATION: www.ultrastarters.com
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